UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/185,070	11/03/1998	TAL MEIRZON	003955	4968

22907 7590 10/24/2003

BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

EXAMINER	
LE, LANA N	

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/185,070	MEIRZON ET AL.	
	Examiner	Art Unit	
	Lana Le	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 21 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soleimani et al (US 5,678, 228) in view of Dent et al (US 5,991,635) and further in view of Swapp et al (US 4,704,735).

Regarding claim 1, Soleimani et al discloses a VSAT terminal comprising an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80;

a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna;

a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface and in electrical connection with the power amplifier and the low noise amplifier for supplying power thereto,

a controller operative to provide a full electrical power supply to the one of the amplifiers in the presence of a communication period (col 4, lines 25-35; col 6, lines 29-39). Soleimani didn't disclose the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the user VSAT interface. However, Dent et al discloses the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the user terminal interface and until the presence of a communication session (col 4, lines 18-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al to Soleimani et al in order to be able to save power when a period of inactivity is detected and to wake up from the sleep mode (less than full power supply) and provides a full power supply when a page is received.

Soleimani et al and Dent didn't further disclose:

the controller being operative to maintain a less-than-full electrical power supply to the one of the amplifiers until the presence of a communication session; and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions. Swapp et al further discloses the controller being operative to maintain a less-than-full electrical power supply to the one of the amplifiers inherent in the transmitter 132's front end) until the presence of a communication session (col 13,

lines 35-48); and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions (col 13, lines 35-48; col 14, lines 51-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the satellite terminal of Swapp et al with the VSAT of Soleimani et al in order to have a lighter compact size terminal, and to turn off one of the amplifiers between communication sessions in order to allow the microprocessor to command the turning on/off of the transmitter's front end only when necessary, ie. when the transmitter needs to transmit when sighting of the satellite is within range, to avoid power losses.

Regarding claim 2, it is rejected as set forth in claim 1, wherein Soleimani et al further presents that the controller is controlled to react when the user VSAT interface send out a signal by providing electrical power to the power amplifier (col 4, lines 15-20).

Regarding claim 3, it is rejected as set forth in claim 1, wherein Soleimani et al further discloses that the controller is controlled to react when the user VSAT interface send out a signal for providing electrical power to the low noise amplifier (col 6, lines 55-67).

Regarding claim 4, it is rejected as set forth in claim 1, wherein Soleimani et al further discloses that the controller dispenses a less than full power supply to the low noise amplifier and the microwave power amplifier when there is no communication signal (col 4, lines 63-67, col 5, lines 1-5) and wherein the controller is controlled to

react when the user VSAT interface sends out a signal by providing a full power supply to the low noise amplifier and the power amplifier (col 4, lines 60-63, col 4, lines 20-25).

Regarding claim 5, Soleimani et al teaches a VSAT terminal according to claim 1, wherein Soleimani et al also discloses that the controller is functional to the user VSAT interface's operation by dispensing max electrical power supply to the low noise amplifier and the power amplifier (col 3, line 57 - col 4 line 4). However, Soleimani et al didn't specifically teach that in the absence of a communication period or while in standby mode, the receiver is still turned on, wherein the controller provides a less-than full power supply to the microwave power amplifier when there is no communication. Swapp et al further discloses that only the receiver is operating when the transmitter is off during the time between conversations or between any interaction of the user interface or the receiver, the receiver is consuming power (col 4, lines 51-56; col 13, lines 35-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Swapp et al to Soleimani et al in order to particularly save power on one unit (transmitter) while the other is left on to wait for or receive periodic incoming signals.

Regarding claim 6, Soleimani et al discloses a VSAT terminal according to claim 1, wherein the controller is responsive to receipt of an incoming transmission via the microwave low noise amplifier for dispensing a maximum electrical power supply to the low noise amplifier and the power amplifier, since Soleimani stated that the receiver chain comprising the low noise amplifier (col 6, lines 57-60) receives communication signals at regular predefined intervals in synchronization with the transmission from the

central hub station (col 5, lines 25- 30). However, Soleimani et al didn't specifically teach that in the absence of a communication period or while in standby mode, the receiver is still turned on, wherein the controller supplies a low power supply to the microwave power amplifier and a full power supply to the microwave low noise amplifier in the absense of a communication period. Swapp et al further discloses that only the receiver is operating when the transmitter is off during the time between conversations or between any interaction of the user interface or the receiver, the receiver is consuming power (col 4, lines 51-56; col 13, lines 35-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Swapp et al to Soleimani et al in order to particularly save power on one unit (transmitter) while the other is left on to wait for or receive periodic incoming signals.

Regarding claim 8, Soleimani et al further discloses that the controller is functional to turn down the electrical power supply to the one of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier (col 5, lines 10-13).

Regarding claim 9, Soleimani et al further discloses that the controller operates in accordance with a predetermined power control scheme for providing electrical power to the microwave power amplifier (col 4, lines 42-53).

Regarding claim 10, Soleimani et al also reveals a VSAT telecommunication network 10 (Fig 1) comprising at least one satellite 4, and a plurality of VSAT terminals 6 talking with the communication satellite, wherein at least one of the VSAT terminals comprises an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a

microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface and in electrical connection with the power amplifier and the low noise amplifier for supplying power thereto, the controller being and functional to dispense a full electrical power supply to either of the amplifiers in the presence of a communication period (col 4, lines 25-35).

Soleimani didn't disclose the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the user VSAT interface. However, Dent et al discloses the controller being functional to dispense a less-than-full electrical power supply to the one of the amplifiers after a predetermined period of inactivity of the user terminal interface (col 4, lines 18-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al to Soleimani et al in order to be able to save power when a period of inactivity is detected and to wake up from the sleep mode (less than full power supply) and provides a full power supply when a page is determined to be received.

Soleimani et al and Dent didn't further disclose:

the controller being operative to maintain a less-than-full electrical power supply to the one of the amplifiers until the presence of a communication session; and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions. Swapp et al further discloses the controller being operative to

maintain a less-than-full electrical power supply to the one of the amplifiers inherent in the transmitter 132's front end) until the presence of a communication session (col 13, lines 35-48); and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions (col 13, lines 35-48; col 14, lines 51-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the satellite terminal of Swapp et al with the VSAT of Soleimani et al in order to have a lighter compact size terminal, and to turn off one of the amplifiers between communication sessions in order to allow the microprocessor to command the turning on/off of the transmitter's front end only when necessary, ie. when the transmitter needs to transmit when sighting of the satellite is within range, to avoid power losses.

Regarding claim 11, Soleimani et al presents a method for managing power consumption in a VSAT terminal having an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface, the power amplifier, and the low noise amplifier, the method comprising of dispensing a full electrical power supply to the one of the amplifiers in the presence of a communication period (col 4, lines 25-35).

Soleimani didn't further disclose the method further comprising:

providing a less-than-full electrical power supply to the one of the amplifiers after a predetermined period of inactivity of the user VSAT interface. However, Dent et al discloses providing a less-than-full electrical power supply to the one of the amplifiers after a predetermined period of inactivity of the user terminal interface (col 4, lines 18-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al to Soleimani et al in order to be able to save power when a period of inactivity is detected and to wake up from the sleep mode (less than full power supply) and provides a full power supply when a page is to be received.

Soleimani et al and Dent didn't further disclose:

the providing of the less-than-full electrical power supply to the one of the amplifiers comprises maintaining the less-than-full electrical power supply to the one of the amplifiers until the presence of a communication session; and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions. Swapp et al further discloses the providing of the less-than-full electrical power supply to the one of the amplifiers comprises maintaining a less-than-full electrical power supply to the one of the amplifiers inherent in the transmitter 132's front end) until the presence of a communication session (col 13, lines 35-48); and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions (col 13, lines 35-48; col 14, lines 51-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the satellite terminal of Swapp et al with the VSAT of Soleimani et al in order to have a

lighter compact size terminal, and to turn off one of the amplifiers between communication sessions in order to allow the microprocessor to command the turning on/off of the transmitter's front end only when necessary, ie. when the transmitter needs to transmit when sighting of the satellite is within range, to avoid power losses.

Regarding claim 12, Soleimani et al further discloses that the method according to claim 11 wherein the step of dispensing a less than full electrical power supply comprises dispensing a less than full power supply to the microwave low noise amplifier and the microwave power amplifier when there is no communication present (col 4, lines 63-67 and col 5, lines 1-5) and wherein the dispensing a full electrical power supply step comprises providing a full electrical power supply to the microwave low noise amplifier and the microwave power amplifier in response to operation of the user VSAT interface (col 4, lines 20-25 and col 4, lines 60-63).

2. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soleimani et al (US 5,678, 228) in view of Dent et al (US 5,991,635) in view of Swapp et al (US 4,704,735) as applied to claim 11 above, and further in view of Walls (US 5,898,401).

Regarding claim 16, Soleimani et al and Dent further discloses a method according to claim 11, wherein Dent discloses the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the front end which inherently includes the LNA (col 4, lines 18-39). Walls discloses the controller being functional to dispense a less-than-full electrical power supply to the low noise amplifier (col 5, lines 17-23). It would have

been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al and Walls to Soleimani et al in order to be able to save power either to the whole terminal or a component of the receiver front end chain as in the LNA here when there's no user's activity.

3. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soleimani et al (US 5,678, 228) in view of Dent et al (US 5,991,635) in view of Swapp et al (US 4,704,735) and further in view of Walls (US 5,898,401).

Regarding claim 17, Soleimani et al discloses a VSAT terminal comprising an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface and in electrical connection with the microwave power amplifier and the microwave low noise amplifier for supplying power thereto, the controller being operative to provide a full electrical power supply to either of the amplifiers in the presence of a communication session (col 4, lines 25-35). Soleimani didn't disclose the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier. Dent discloses controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier (col 4, lines 18-39).

Soleimani et al and Dent didn't further disclose:

the controller being operative to maintain a less-than-full electrical power supply to the one of the amplifiers until the presence of a communication session; and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions. Swapp et al further discloses the controller being operative to maintain a less-than-full electrical power supply to the one of the amplifiers inherent in the transmitter 132's front end) until the presence of a communication session (col 13, lines 35-48); and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions (col 13, lines 35-48; col 14, lines 51-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the satellite terminal of Swapp et al with the VSAT of Soleimani et al in order to have a lighter compact size terminal, and to turn off one of the amplifiers between communication sessions in order to allow the microprocessor to command the turning on/off of the transmitter's front end only when necessary, ie. when the transmitter needs to transmit when sighting of the satellite is within range, to avoid power losses. Soleimani et al, Swapp et al and Dent didn't specifically disclose a low noise amplifier. Walls discloses the controller being functional to dispense a less-than-full electrical power supply to the low noise amplifier (col 5, lines 17-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al and Walls to Soleimani et al in order to be able to save power either to the whole terminal or a component of the receiver front end chain as in the LNA here when there's no user's activity.

Regarding claim 18, Soleimani et al also reveals a VSAT telecommunication network 10 (Fig 1) comprising at least one satellite 4, and a plurality of VSAT terminals 6 talking with the communication satellite, wherein at least one of the VSAT terminals comprises an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the power amplifier to the antenna; a receiver 80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface and in electrical connection with the microwave power amplifier and the microwave low noise amplifier for supplying power thereto, the controller being and functional to dispense a full electrical power supply to either of the amplifiers in the presence of a communication period (col 4, lines 25-35). Soleimani didn't disclose the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier. Dent discloses controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier (col 4, lines 18-39).

Soleimani et al and Dent didn't further disclose:

the controller being operative to maintain a less-than-full electrical power supply to the one of the amplifiers until the presence of a communication session; and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions. Swapp et al further discloses the controller being operative to

maintain a less-than-full electrical power supply to the one of the amplifiers inherent in the transmitter 132's front end) until the presence of a communication session (col 13, lines 35-48); and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions (col 13, lines 35-48; col 14, lines 51-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the satellite terminal of Swapp et al with the VSAT of Soleimani et al in order to have a lighter compact size terminal, and to turn off one of the amplifiers between communication sessions in order to allow the microprocessor to command the turning on/off of the transmitter's front end only when necessary, ie. when the transmitter needs to transmit when sighting of the satellite is within range, to avoid power losses.

Soleimani et al, Swapp et al and Dent didn't specifically disclose a low noise amplifier. Walls discloses the controller being functional to dispense a less-than-full electrical power supply to the low noise amplifier (col 5, lines 17-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al and Walls to Soleimani et al in order to be able to save power either to the whole terminal or a component of the receiver front end chain as in the LNA here when there's no user's activity.

Regarding claim 19, Soleimani et al presents a method for managing power consumption in a VSAT terminal having an antenna 12 (see Fig. 2 and hereafter); a microwave power amplifier 28, a microwave low noise amplifier in the receiver chain 80; a transmitter 20 coupled via the microwave power amplifier to the antenna; a receiver

80 coupled via the microwave low noise amplifier to the antenna; a user VSAT interface 16; and a controller 45 in communication with the user VSAT interface, the microwave power amplifier, and the low noise amplifier, the method comprising of dispensing a full electrical power supply to either of the amplifiers in the presence of a communication period (col 4, lines 25-35). Soleimani didn't disclose the controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the microwave low noise amplifier.

Dent discloses controller being functional to dispense a less-than-full electrical power supply to either of the amplifiers after a predetermined period of inactivity of the inherent microwave low noise amplifier in the receiver's front end (col 4, lines 18-39).

Soleimani et al and Dent didn't further disclose:

the providing of the less-than-full electrical power supply to the one of the amplifiers comprises maintaining the less-than-full electrical power supply to the one of the amplifiers until the presence of a communication session; and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions. Swapp et al further discloses the providing of the less-than-full electrical power supply to the one of the amplifiers comprises maintaining a less-than-full electrical power supply to the one of the amplifiers inherent in the transmitter 132's front end) until the presence of a communication session (col 13, lines 35-48); and wherein the controller does not return the one of the amplifiers to full electrical power between communication sessions (col 13, lines 35-48; col 14, lines 51-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace

the satellite terminal of Swapp et al with the VSAT of Soleimani et al in order to have a lighter compact size terminal, and to turn off one of the amplifiers between communication sessions in order to allow the microprocessor to command the turning on/off of the transmitter's front end only when necessary, ie. when the transmitter needs to transmit when sighting of the satellite is within range, to avoid power losses.

Soleimani et al, Swapp et al and Dent didn't specifically disclose a low noise amplifier. Walls discloses the controller being functional to dispense a less-than-full electrical power supply to the low noise amplifier (col 5, lines 17-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the teaching of Dent et al and Walls to Soleimani et al in order to be able to save power either to the whole terminal or a component of the receiver front end chain as in the LNA here when there's no user's activity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana Le whose telephone number is (703) 308-5836. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Lana Le

October 20, 2003

EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600